

Date: Monday, 23/02/2009 3:29:06 PM  
 User: Julie Dawson

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : FORWARD GUIDE
<b>Job Number</b> : 45996	
<b>Estimate Number</b> : 13355	
<b>P.O. Number</b> :	<b>Part Number</b> : D3589047
<b>This Issue</b> : 23/02/2009 <b>S.O. No.</b> :	<b>Drawing Number</b> : D3589 REV B
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : / / <b>Type</b> : LARGE FAB ASSY	<b>Drawing Revision</b> : B
<b>Previous Run</b> : 45013	<b>Material</b> :
<b>Written By</b> :	<b>Due Date</b> : 15/03/2009 <b>Qty:</b> 4 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> : <u>PD 09.02.24</u>	
<b>Comment</b> : Est Rev:A 08-05-30 new issue DD verified by:ec Est Rev:B 09-02-20 rev.b asper dwg DD verified by:EC	

## Additional Product

Job Number:



Seq. #: Machine Or Operation:

Description :

1.0 D35895 LATCH GUIDE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

LINK

batch: B46104

PD 09-05-07

2.0 D358917 FWD GUIDE PLATE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

FWD LATCH GUIDE TUBE

batch: B45011

PD 09-05-07

3.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1- assemble and weld as per dwg D3589 QSI004

304 Stainless Steel rod batch: M108160

PD 09-05-07

4.0 QC9 VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

6/09.05.12

5.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

8/09/05/12 (x4)

-042

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Monday, 23/02/2009 3:29:06 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FORWARD GUIDE

Job Number: 45996

Part Number: D3589047

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

ST 116

SS 09/05/13 (X4)

7.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/05/13 J

Job Completion



MF  
09-05-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

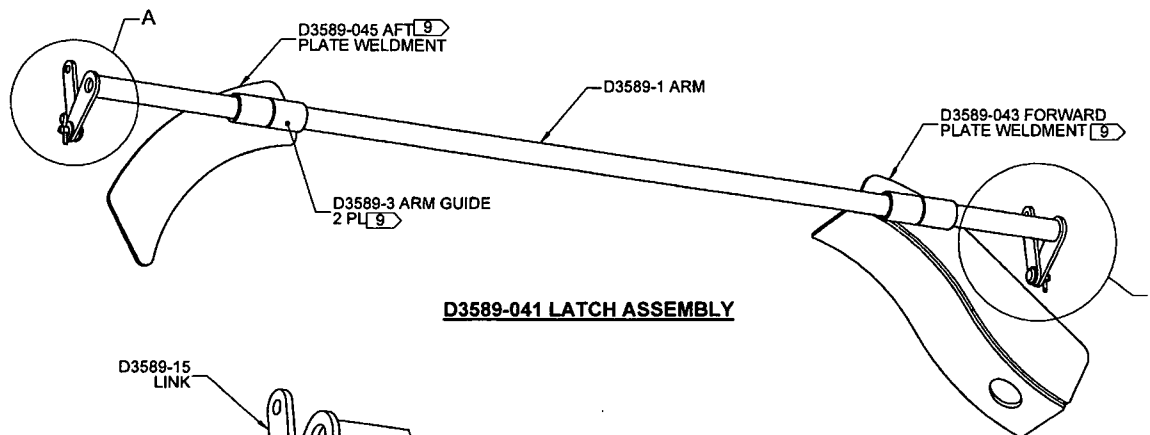
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

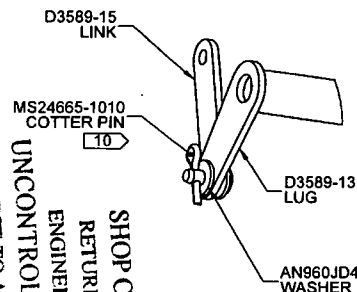
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

QTY. -041	P/N	DESCRIPTION
X	D3589-041	LATCH ASSEMBLY
1	D3589-045	AFT PLATE WELDMENT
1	D3589-043	FORWARD PLATE WELDMENT
1	D3589-1	ARM
2	D3589-3	ARM GUIDE
2	D3589-13	LUG
2	D3589-15	LINK
4	AN960JD4	WASHER
2	MS20392-1C7	PIN
2	MS24665-1010	COTTER PIN

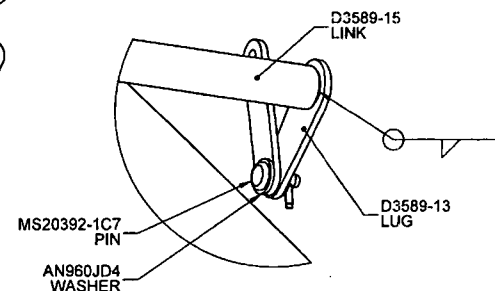


**D3589-041 LATCH ASSEMBLY**



**DETAIL A: LINK ASSEMBLY DETAIL**

SCALE 2X  
2 PL



**DETAIL B: WELDING AND  
LINK ASSEMBLY DETAIL**

SCALE 2X  
2 PL

**RELEASED**  
07/26/05

- D3589-041 NOTES:**
- 1) MATERIAL: N/A
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3589-041" USING FINE POINT PERMANENT INK MARKER
  - 7) WEIGHT: 0.73 lbs
  - 8) WELDING: PER DART QSI 004 USING DT9033
  - 9) IDENTIFIED PARTS ARE LOOSE ON D3589-1 ARM
  - 10) INSTALL COTTER PIN IN ACCORDANCE WITH MS33540

B	0.80 AND 0.83 REF WERE 1.97 AND 0.80 (ZN C8-2); 0.50 WAS 1.89 (ZN C3-2); 0.75 REF REPLACES 2.01 (ZN C2-2); 29" WAS 15" (ZN B2-2); 19.00 WAS 18.88 (ZN D4-4); REDESIGNED D3589-9 (ZN A6-6) AND D3589-11F (ZN C2-3) REASON: REDESIGN FOR PROPER FIT AND TO MATCH TESTED CONFIGURATION	MB	08.06.25
A	NEW ISSUE	MB	08.05.29
REV.	DESCRIPTION	BY	DATE
DESIGN	J		
DRAWN	J		
CHECKED	PH		
MFG. APPR.	DS		
APPROVED	JP		
DE APPR.	JH		
DATE	08.06.25		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.  
**D3589**

TITLE  
**LATCH ASSEMBLY**

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REV. B  
SHEET 1 OF 8  
SCALE  
NTS

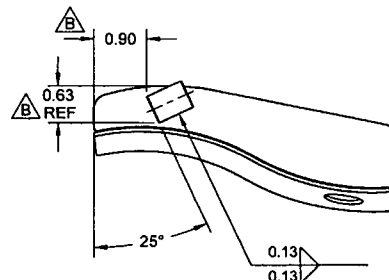
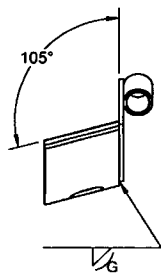
QTY -043	QTY -045	P/N	DESCRIPTION
X		D3589-043	FORWARD PLATE WELDMENT
	X	D3589-045	AFT PLATE WELDMENT
1	1	D3589-3	ARM GUIDE
	1	D3589-7	AFT GUIDE PLATE
1		D3589-9	FORWARD GUIDE PLATE
1		D3589-11	FORWARD GUIDE PLATE

D3589-3  
ARM GUIDE



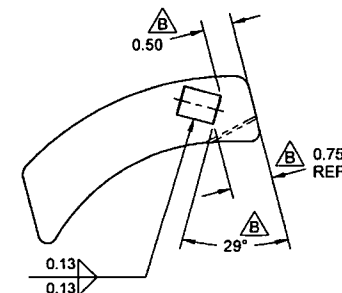
D3589-9  
FORWARD GUIDE PLATE

D3589-11 [9]  
FORWARD GUIDE PLATE



**D3589-043 FORWARD PLATE WELDMENT**

D3589-7  
AFT GUIDE PLATE  
D3589-3  
ARM GUIDE



**D3589-045 AFT PLATE WELDMENT**

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WORK ORDER  
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**D3589-043/-045 NOTES:**

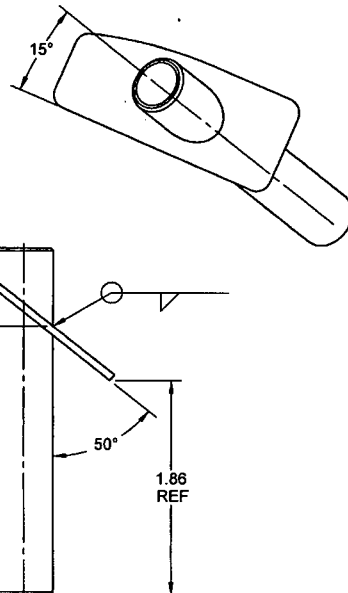
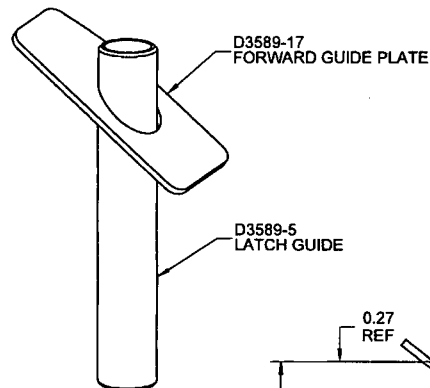
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3589-0XX" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT:
  - D3589-043 = 0.22 lbs
  - D3589-045 = 0.10 lbs
- 8) WELDING: PER DART QSI 004 USING DT9033
- 9) FORM D3589-11 TO FIT D3589-9 MATING EDGE

**RELEASED**  
09/07/05 N/A

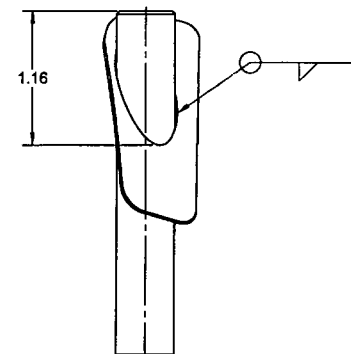
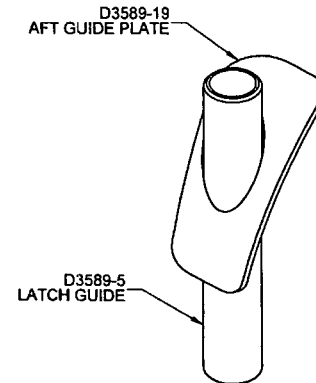
DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. <b>D3589</b>	REV. B
MFG. APPR.			SHEET 2 OF 8
APPROVED		TITLE <b>LATCH ASSEMBLY</b>	SCALE NTS
DE APPR.			
DATE	08.06.25		

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QTY -047	QTY -049	P/N	DESCRIPTION
X		D3589-047	FORWARD GUIDE
	X	D3589-049	AFT GUIDE
1	1	D3589-5	LATCH GUIDE
1		D3589-17	FORWARD GUIDE PLATE
	1	D3589-19	AFT GUIDE PLATE



**D3589-047 FORWARD GUIDE**



**D3589-049 AFT GUIDE**

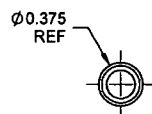
**RELEASED**  
*CH/20/07/10/07*

**D3589-047/-049 NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3589-0XX" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.07 lbs EACH
- 8) WELDING: PER DART QSI 004

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MFG. APPR.			SHEET 3 OF 8
APPROVED		TITLE <b>LATCH ASSEMBLY</b>	SCALE
DE APPR.			NTS
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*WORK ORDER*

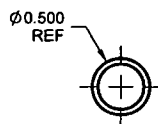


0.03 X 45°  
CHAMFER  
2 PL

19.00

0.065  
REF

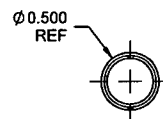
**D3589-1 ARM**



0.058  
REF

0.65

**D3589-3 ARM GUIDE**



0.03 X 45°  
CHAMFER  
2 PL

0.049  
REF

3.00

**D3589-5 LATCH GUIDE**

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WORK ORDER NO. 15996

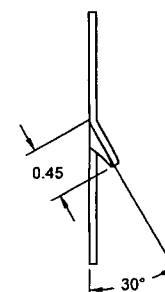
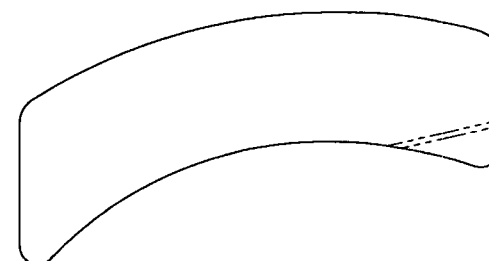
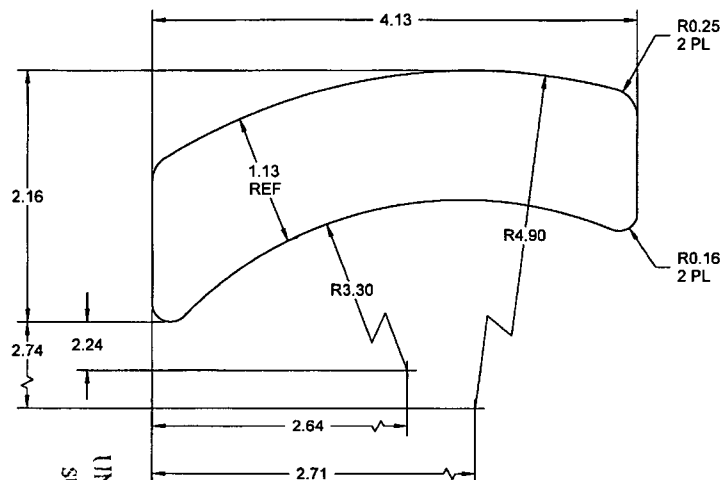
**D3589-1/-3/-5 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SEAMLESS ROUND TUBING  
D3589-1: 0.375 O.D. X 0.065 WALL (REF. DART SPEC M304TR0.375W.065)  
D3589-3: 0.500 O.D. X 0.058 WALL (REF. DART SPEC M304TR0.500W.058)  
D3589-5: 0.500 O.D. X 0.049 WALL (REF. DART SPEC M304TR0.500W.049)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: - D3589-1 = 0.34 lbs  
- D3589-3 = 0.01 lbs  
- D3589-5 = 0.06 lbs

**RELEASED**  
09/02/05

DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE LTD</b>	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	<b>D3589</b>	SHEET 4 OF 8
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>LATCH ASSEMBLY</b>	NTS
DATE	<b>08.06.25</b>	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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**D3589-7 AFT GUIDE PLATE**  
MAKE FROM D3589-7F

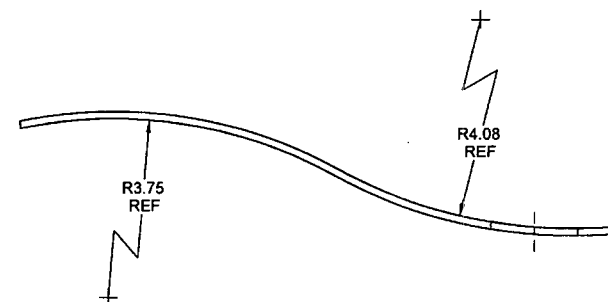
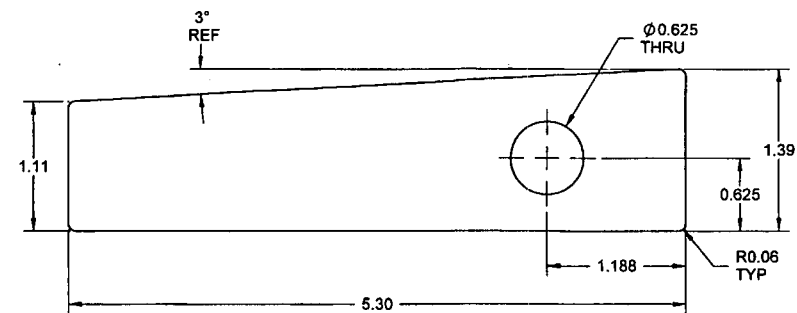
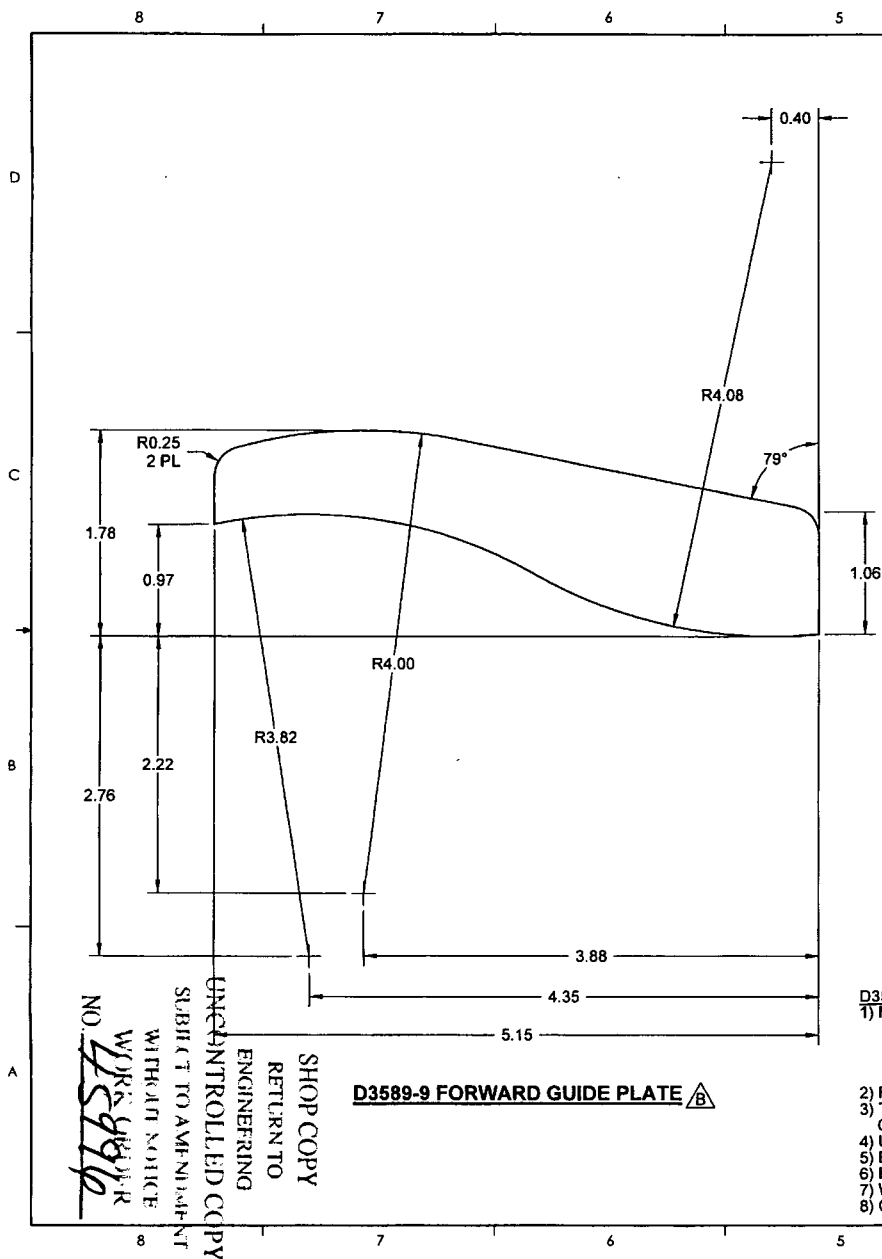
**D3589-7F AFT GUIDE PLATE**  
**FLAT PATTERN**

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- D3589-7F-7F NOTES:**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, PER AMS 5513 OR AMS 5524, OR MIL-S-5059 (ANNEALED) 2B FINISH 16 GAUGE (0.063 THICK), (REF. DART SPEC M304S16GA)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.09 lbs

**RELEASED**  
09/02/05 MIB

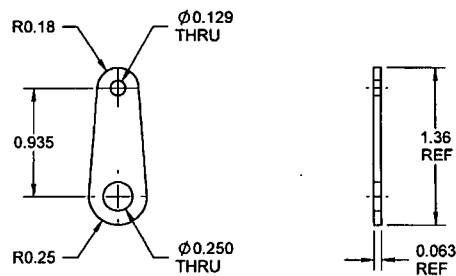
DESIGN	JH	<b>DART AEROSPACE LTD</b>	
DRAWN	JH	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JH	DRAWING NO.	REV. B
MFG. APPR.	JH	D3589	SHEET 5 OF 8
APPROVED	JH	TITLE	SCALE
DE APPR.	JH	LATCH ASSEMBLY	NTS
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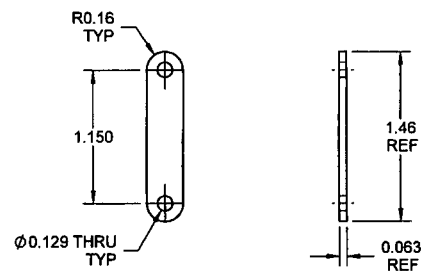
- D3589-9/-11/-11F NOTES:**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, PER AMS 5513 OR AMS 5524, OR MIL-S-5059 (ANNEALED) 2B FINISH 16 GAUGE (0.063 THICK), (REF. DART SPEC M304S16GA)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.09 lbs EACH
  - 8) CONTROL SHAPE PER DT9021 TEMPLATE

DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO. <b>D3589</b>	REV. B
CHECKED		SHEET 6 OF 8	
MFG. APPR.		TITLE	SCALE
APPROVED		<b>FORWARD GUIDE PLATE</b>	NTS
DE APPR.		COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	08.06.25		

**RELEASED**  
09/22/05



**D3589-13 LUG**



**D3589-15 LINK**

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SUBJECT TO APPROVAL  
WORK ORDER  
NO. 45994

**D3589-13/-15 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, PER AMS 5513 OR AMS 5524, OR MIL-S-5059 (ANNEALED) 2B FINISH, 16 GAUGE (0.063 THICK), (REF. DART SPEC M304S16GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.01 lbs EACH

**RELEASED**  
09/04/05

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. <b>D3589</b>	REV. B
MFG. APPR.			SHEET 7 OF 8
APPROVED		TITLE <b>LATCH ASSEMBLY</b>	SCALE
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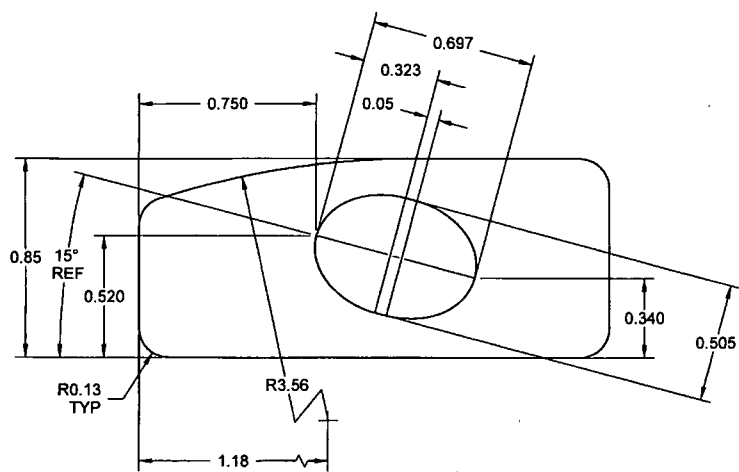
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D

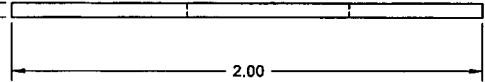
C

B

A



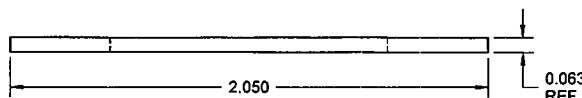
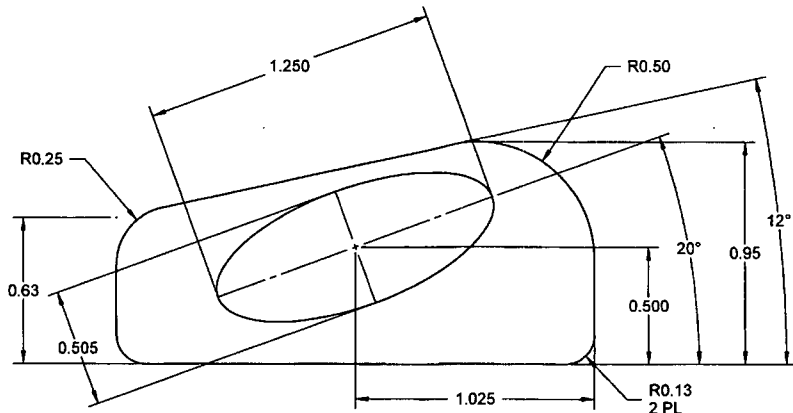
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REF



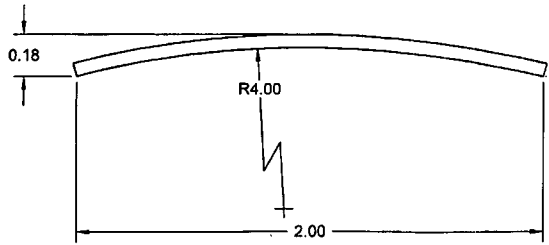
**D3589-17 FORWARD GUIDE PLATE**

NO. 25996  
WORK ORDER  
WITHOUT NOTICE  
SUBJECT TO AMENDMENT  
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- D3589-17/-19/-19F NOTES:**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, PER AMS 5513 OR AMS 5524, OR MIL-S-5059 (ANNEALED) 2B FINISH 16 GAUGE (0.063 THICK), (REF. DART SPEC M304S16GA)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.02 lbs EACH



**D3589-19F AFT GUIDE PLATE FLAT PATTERN**



**D3589-19 AFT GUIDE PLATE**  
(MAKE FROM D3589-19F)

**RELEASED**  
09/03/05/11/14

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3589	SHEET 8 OF 8
APPROVED		TITLE	SCALE
DE APPR.		LATCH ASSEMBLY	NTS
DATE	08.06.25	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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